

No. 1.

From. D. 50 96

To D. 51 523 (even numbers)



Nest D. no. 5096

Nest H. no. 4897

— " — 4899

— " — 4905

Dredge } No. 5096. Date, 2 Jan. 1908  
 Hydro. Sdg. Mch. Tanner Nat. Reel T. N. Shot } 30 lbs.  
 Turns Cor'n Depth 28 fms.  
 Sdg. Cup Smaller Amt. Bot'm Sample cap fall  
 Character of Bottom gy. TT S. SL  
 Thermom. Make Cor'n Instr. Stem. X  
 No. X  
 Bottom Reading X Cor'd Temp. X  
 Temp. Surf. { 79° Time 10.48 } Air { 79 1/2 °  
 79° Time 11:12 } Air { 79 3/4 °  
 Density: Surf. fms.  
 Wind: Direction E N E Force 3  
 Baromet. 29.90 Amt. of Clouds 8 State of Sea 6  
 Weather Be

Direction and Force of Current. { Surface  
 of Current. Bottom

Tide

General Locality China Sea, off Luzon.  
 Monga Id N 54° W. Corregidor Lt. N.  
 Position 14° 20' 23" N. - 120° 34' 15" E.  
 Chart used: No. 4240 C.S. Ed'n Feb. 07.  
 Drift: Direction SW Distance  
 Depth of Haul bottom  
 Apparatus and Rig used g. Tanner, 1 talent, mud bag

Time towing 0 h. 21 m.

Remarks: Character of bottom is expressed  
 in the abbreviations used by the Hydro-  
 graphic Office; force of wind, amt. of clouds,  
 state of the sea, and weather by log book  
 symbols; bearings are true unless other-  
 wise marked throughout this log  
 position.

Deck Officer Btm. Cassidy. Recorder V. Grybil-  
 11-1023

SOUNDING WIRE.					FMS.	DREDGING CABLE.						
A. M. DOWN.	UP.	A. M.	A. M. DOWN.	UP.		A. M.	UP.	A. M.				
10.	41	30	10	42	50	0	10	46	50	11	17	20
10.	42	00	10	42	10	28	400	40	10	48	40	
							200	45	11	01	10	11: 10 10
							300					
							400					
							500					
							600					
							700					
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							4900					

Dredge } No. 5097 Date, 2 Jan., 1908  
Hydrog. }

Sdg. Mech. Reel Shot } Lead lbs.

Turns Cor'n Depth by Ckt. 30 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom by Ckt. gr. II. ?

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 79° Time 11:15 } Air { 79°/4  
79° Time 11:40 } 82°/2

Density: Surf. fms.

Wind: Direction N E by E. Force 3

Baromet. 29.89 Amt. of Clouds 8 State of Sea S

Weather Be

Direction and Force of Current { Surface  
Bottom "

Tide

General Locality China Sea, off Luzon.

Manga Id N 42° W, Corregidor Lt North 6°

Position 14° 19' 15" N - 120° 33' 52" E.

Chart used: No. 4240, C. S. Ed'n Feb. 07.

Drift: Direction NW by W Distance

Depth of Haul bottom

Apparatus and Rig used to primitively

Time towing 0 h. 19 m.

Remarks:

Deck Officer Ben Cassidy Recorder J. F. M. 11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.					
M. Down.	UP.	M.		A. M.	Down.	UP.	A. M.		
No sounding.			0	11	14	50	11	42	30
			100	11	18	15	11	38	05
			200	11	22	00			
			300	11	27	10	11	37	50
			400						
			500						
			600						
			700						
			800						
			900						
			1000						
			1100						
			1200						
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			4900						

Dredge } No. 5-098 Date, Jan 2, 1908  
Hydrog

Sdg. Mch. 2 Reel Shot } Lead lbs.

Turns Cor'n Depth fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Instr. Cor'n { Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 80° Time 12.44 P } Air { 82°  
79° Time 1.00 P } 82°

Density: Surf. fms.

Wind: Direction E.N.E. Force 3

Baromet. 29.84 Amt. of Clouds 8 State of Sea

Weather bc

Direction and Force of Current { Surface  
Bottom

Tide

General Locality Chinal Schafft Long Island

Wonga Id N 24° W - Corregidor Lt N 21° E

Position 140° 18' 40" N - 120° 32' 40" E.

Chart used: No. 4240 C.S. Ed'n Feb/27

Drift: Direction N X N. Distance

Depth of Haul bottom reached with 60 fath

Apparatus and Rig used 9' Tanner, 1 ton weight,

and bag. 2

Time towing — h. 20 m.

Remarks: Net came up, with wrong side up.

Deck Officer Peter Mather Recorder C. E. Long

SOUNDING WIRE.			FMS.	DREDGING CABLE.			
M. Down.	UP.	M.		P. M. Down.	UP.	P. M.	
			0	12	39 30	1 08 30	
			100		43 15	04 30	
			500	12	43 30	1 03 45	
			300				
			400				
			500				
			600				
			700				
			800				
			900				
			1000				
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Dredge } No. 5-099 Date, Jan 2, 1908  
Hydrog }

Sdg. Mch. Reel Shot } Lead lbs.

Turns 30 Cor'n. Depth fms.

Sdg. Cup *Long line* Amt. Bot'm Sample

Character of Bottom

Thermom. Make 'n Instr. Stem.

Bottom Reading Cor'd Temp. fms.

Temp. Surf.  $\{ 79^{\circ}$  Time 1.20 P } Air  $\{ 81^{\circ}$   
 $80^{\circ}$  Time 1.35 P. } Air  $\{ 81^{\circ}$

Density: Surf. fms.

Wind: Direction E.N.E. Force 2-3

Baromet. 29.52 Amt. of Clouds 8 State of Sea S.

Weather be.

Direction and Force of Current. Surface  
Bottom

Tide

General Locality China Seas, off Luzon Bay

Strong Id. bore N 70° W, Corregidor Light

Position 14° 18' 55" N - 120° 31' 20" E N 36° E

Chart used: No. 4240 C.S. Ed'n Feb. 1907

Drift: Direction *W* Distance —

Depth of Haul Net on bottom at 60 fathms

Apparatus and Rig used as before

Time towing — h. 20 m.

Remarks:

Deck Officer *John Mutter* Recorder *C. E. L. Long*

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. DOWN.	UP.	M.		P.M.	DOWN.	UP.
			0	1	16 00	1 45 05
			100	1	20 10	1 41 15
			110			
			200	1	20 40	1 40 40
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
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Dredge No. 5182 Date, 19  
Hydrog. Sdg. Mech. Reel Shot lbs.  
Turns 35 Cor'n None Depth 13.6 fms.  
Sdg. Cup Amt. Bot'm Sample 2000 00  
Character of Bottom. ~~gravel~~

Thermom. Make Z Cor'n Instr.  
No. one Stem.

Bottom Reading Cor'd. Temp.

Temp. Surf. 80° Time 2:28 Air 85°  
80° Time 2:45

Density: Surf. fms.

Wind: Direction E. N. E. Force 3

Baromet. 29.79 Amt. of Clouds 8 State of Sea 2

Weather

Direction and Force of Current. Surface  
Bottom

Tide

General Locality China Sea, off Lengzon, by  
Hong Id. N 17° W, Traile Id. N 77° E  
Position 140° 17' 15" N - 120° 32' 40" E

Chart used: No. 4240 C. S. Ed'n

Drift: Direction N.E. Distance

Depth of Haul Bottom at 45

Apparatus and Rig used as before

Time towing h. m.

Remarks:

SOUNDING WIRE.					FMS.	DREDGING CABLE.		
M. DOWN.	UP.	M.				M. DOWN.	UP.	M.
2	15	40	2	17	10	0	2	18
2	15	40	2	16	30	35	2	18
						200		
						300		
						400		
						500		
						600		
						700		
						800		
						900		
						1000		
						1100		
						1200		
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Dredge } No. 5101 Date, 1905. 19-5  
Hydrog. }  
Sdg. Mch. Reel Shot  
Turns 80 Cor'n Depth 43 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom

Thermom. { Make Cor'n Instr.  
No. Cor'n Stem.  
Bottom Reading Cor'd Temp.  
Temp. Surf. { 78 Time 112 44 Air 82  
78 Time 140 72 82

Density: Surf. 1.02391 fms.  
Wind: Direction East Force 2.16.3  
Baromet. 27.6 Amt. of Clouds 3 State of Sea

Weather  
Direction and Force of Current { Surface  
Bottom

Tide  
General Locality  
Position 14° 24' S. 120° 12' E.

Chart used: No. 42406 S. Edn. Feb. 1907  
Drift: Direction 14° 24' S. Distance  
Depth of Haul 37 m.  
Apparatus and Rig used

Time towing h. m.

Remarks:

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. DOWN.	UP.	M.		M. DOWN.	UP.	M.
			0	1	12	5
			100	1	15	0
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
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			4900			

Dredge Lightning, No. 55 / 020 Date, June 20, 1901

Sdg. Mch. Reel Shot Lead lbs.

Turns Cor'n Depth 22 fms.

Sdg. Cup Amt. Bot'm Sample (by cht)

Character of Bottom

Thermom. Make Cor'n Instr. fms.

No. Cor'n Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. 81° Time 4:15 P.M. Air 65°

81° Time 4:35 P.M. Air 87°

Density: Surf. 1.02447 fms.

Wind: Direction ESE Force 2

Baromet. 29.88 Amt. of Clouds 8 State of Sea

Weather fog.

Direction and Force of Current Surface fms.

Bottom

Tide

General Locality C. 10° S. 120° E.

Lat. 10° S. Long. 120° E. Position

10° S. 120° E. - 10° S. 120° E. A

Chart used: No. 1174, Edn. Jan. 1892

Drift: Direction NE by E Distance

Depth of Haul 28 fms. 150

Apparatus and Rigs used 10 ft. Lower

Time towing 0 h. 20 m.

Remarks: The cutter was not used at the sea, but entered on June 21 and it may not have been the 180 fms. wind.

Deck Officer C. J. C. W. Recorder A. J. C. W. 11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.					
M. DOWN.	UP.	M.		P.	M.	DOWN.	UP.	P.	M.
			0	4	12	45	4	37	40
			100	45	4	14	25		
			200	50	4	15	20		
			300	57	4	19	45	4	35
			400						10
			500						
			600						
			700						
			800						
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## SOUNDING WIRE.

M. DOWN. | UP. | M.

FMS.  
○

## DREDGING CABLE.

P. M. DOWN. | UP. | P. M.

0	1 44	00	2 07	40
100	7 56	70	2 05	30
200				
300				
400				
500				
600				
700				
800				
900				
1000				
1100				
1200				
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Dredge } No. 5104 Date, 11/11/19  
Hydro }  
Sdg. Mch. Reel Shot  
Sdg. Cup Amt. Bot'm Lbds.  
Character of Sample  
Bottom  
Thermom. Make Cor'n Instr.  
No. Cor'n Stem.  
Bottom Reading 80 Cor'd Temp.  
Temp. Surf. Time 10.16.11.11. Air 81  
78 Time 10.14.11.11. 82  
Density: Surf. fms.  
Wind: Direction N.E. Force 3-2  
Baromet. 30.02 Amt. of Clouds / State of Sea  
Weather Partly  
Tide

Direction and Force of Current Surface  
Bottom  
General Locality Diving Bay  
Course 80°. 55. 508°. 15. 10. Pt. 672  
Position 14° 45' 16" S - 120° 15' 30" E  
Chart used: No. 425463 Ed'n  
Drift: Direction SSW Distance 1/4  
Depth of Haul 33. 1/2 36  
Apparatus and Rig used 12 Hammer Head  
floats Time towing 2 h. 20 m.  
Remarks

## SOUNDING WIRE.

M. Down. | Up. — M.

FMS.

## DREDGING CABLE.

M. Down. | Up. — M.

0	12	15	50	0	44	35
67	10	19	80	10	37	
200						
300						
400						
500						
600						
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Dredge No. 6 Date, Jan 19  
 Hydrog. Sdg. Mech. Reel Shot  
 Turns Cor'n Depth fms.  
 Sdg. Cup Amt. Bot'm Sample  
 Character of Bottom  
 Thermom. Make Instr.  
 No. Cor'n Stem.  
 Bottom Reading Cor'd. Temp.  
 Temp. Surf. 76 Time 11 Air 81  
 Temp. 76 Time 11:25 Air 81  
 Density: Surf. fms.  
 Wind: Direction N. E. Force 3  
 Baromet. 30 Amt. of Clouds / State of Sea S  
 Weather B.C. B.C.

Direction and Force of Current Surface  
 of Current. Bottom

Tide

General Locality Subic Bay

Position 14° 43' 15" N - 120° 12' 25" E

Chart used: No. 425468 Ed'n

Drift: Direction N. 60° W. Distance

Depth of Haul 25 fms. (50 m.)

Apparatus and Rig used As Be

Time towing h. m.

Remarks

Deck Officer (Signature) Recorder (Signature) 11-1023

## SOUNDING WIRE.

M. DOWN. | UP. M.

## DREDGING CABLE.

FMS. M. DOWN. | UP. M.

0	11	02	23	11	28	41
400	11	04	30			
800	11	07	28	11	35	40
300						
400						
500						
600						
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800						
900						
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Dredge No. 5106 Date, Jan. 1908  
 Sdg. Mech. Reel Shot} lbs.  
 Turns Cor'n Depth 28-37 fms.  
 Sdg. Cup Amt. Bot'm Sample  
 Character of Bottom, by ch. S.  
 Thermom. Make S. D. Instr.  
 No. 10 Stem.  
 Bottom Reading Cor'n Cor'd Temp.  
 Temp. Surf. 78° Time 1:24 86.5°  
 175° Time 2:22 85.5°  
 Density: Surf. fms.  
 Wind: Direction N.E. by N Force 4  
 Baromet. 29.92 Amt. of Clouds 7 State of Sea S  
 Weather  
 Direction and Force of Current Surface  
 of Current Bottom  
 Tide

General Locality North Channel, N. E. by N.  
 Between Is. C. S. S. and N. C. S.  
 Position 14° 23' N. Lat. 75° 10' E. Long. 23° 50' N.  
 Chart used: No. 4240 C. S. Buoy 1000 ft.  
 Drift: Direction N.E. Distance 1.2 m.  
 Depth of Haul 20 m.  
 Apparatus and Rig used 12' Trawl. Trawl with  
 mud drag, tail weight, 2.5 m. weight  
 and 3' glass float.  
 Time towing h. 20 m.

Remarks: Trawl down on bottom, tail in  
 and tail dragging - time not enough.

Deck Officer W. H. S. Recorder C. W. H. 11-1023

## SOUNDING WIRE.

M. Down. | Up.    M.

FMS.

## DREDGING CABLE.

M. Down. | Up.    M.

0	1	53	30	2	21	50
400	90	1	57	30	2	18
200						
300						
400						
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Dredge No. 5107 Date, 9 ~~Jan.~~, 1905  
Sdg. Mech. Reel Shot} lbs.  
Turns Cor'n Depth 28 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom by Eye S. S.  
Thermom. Make S. Cor'n Instr.  
No. 7 Stem.  
Bottom Reading Cor'd Temp.  
Temp. Surf. 78° Time 7:34 p.m. Air 84°  
Time 7:52 p.m. 83°  
Density: Surf. 1.02379 fms.  
Wind: Direction NNE by NE Force 4.  
Baromet. 29.92 Amt. of Clouds 9 State of Sea 3.  
Weather Fair

Direction and Force of Current Surface  
Bottom

Tide

General Locality North China Sea,  
Mind S. China, 20° N. Latitude  
Position 14° 24' N. 120° 30' E.  
Chart used: No. 4252 Edn. Feb. 1907.  
Drift: Direction S. S. E. Distance 1.5 m.  
Depth of Haul Bottom  
Apparatus and Rig used

Time towing — h. 20 m.

Remarks:

Deck Officer *W. C. Ford*

Recorder

## SOUNDING WIRE.

## DREDGING CABLE.

M. DOWN.	UP.	M.	FMS.	M. DOWN.	UP.	M.
			0	2   34   00	3   00   50	
			100	2   37   30	2   57   10	
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
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			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 1 Date, Oct. 1, 19  
Hydrog. }  
Sdg. Mech. Trawl Net Reel } Shot } 30 lbs.  
Turns 1 Cor'n 1 Depth 1 fms.  
Sdg. Cup 1 Amt. Bot'm 1 Sample 1  
Character of Bottom 1  
Thermom. { Make 1 Instr. -4  
No. 158022 Cor'n { Stem. 00.  
Bottom Reading 80.4 Cor'd Temp. 80  
Temp. Surf. { Time 8 Time 8:40 Air {  
Baromet. 29.88 Amt. of Clouds 1 State of Sea 2  
Weather 2  
Wind: Direction E Force 3

Direction and Force of Current { Surface  
of Current. Bottom

Tide

General Locality

Position 11° 15' S 16° 15' E

Chart used: No. 1424 Ed'n

Drift: Direction NE 34 N Distance 1

Depth of Haul Bottom

Apparatus and Rig used 9' Alu. 170 lb. 10' 10" weight, sand bag, glass bottle

Remarks: Time towing 10 min. m.

Wire in advance & replaced.  
All gear in good condition.  
At 10 min. the net was

SOUNDING WIRE.			FMS.			DREDGING CABLE.			
A	M. DOWN.	UP.	M.			M.	M. DOWN.	UP.	M.
8	01 10 8	02 40		0					
8	01 20 8	02 20		100					
				200					
				300					
				400					
				500					
				600					
				700					
				800					
				900					
				1000					
				1100					
				1200					
				1300					
				1400					
				1500					
				1600					
				1700					
				1800					
				1900					
				2000					
				2100					
				2200					
				2300					
				2400					
				2500					
				2600					
				2700					
				2800					
				2900					
				3000					
				3100					
				3200					
				3300					
				3400					
				3500					
				3600					
				3700					
				3800					
				3900					
				4000					
				4100					
				4200					
				4300					
				4400					
				4500					
				4600					
				4700					
				4800					
				4900					

Dredge } No. 510 Date, Oct. 18, 1911  
Hydrog. }  
Sdg. Mch. Tern-Blsh. Reel

Shuttle } 3.7 lbs.  
Lead } 1.1 lbs.

Turns 16 Cor'n. wind Depth 16 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Time Cor'n { Instr.  
No. 711 Stem

Bottom Reading Cor'd Temp.

Temp. Surf. { 80° Time 9:01 } Air { 81°  
80° Time 9:13 }

Density: Surf. 1.02406 fms.

Wind: Direction ENE Force 2-3

Baromet. 29.96 Amt. of Clouds State of Sea

Weather

Direction and Force { Surface  
of Current. Bottom

Tide

General Locality Sea Off W.  
Lat. 31° E. Long.

Position 140° 5' - 32" N 120° 20' 15" E

Chart used: No. C.S. 4240 Ed'n

Drift: Direction S. S. E. Distance 3

Depth of Haul Bottom

Apparatus and Rig used 8 tangie swabs, 180°

Time towing h. 10 m.

Remarks: 200 fms. 100 fms.

Deck Officer Recorder 1023

Deck Officer Recorder 1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.			
4 M.	Down.	Up.	M.	4 M.	Down.	Up.	M.
8	46	20	8	47	20	8	57
8	47	20	8	48	20	8	58
				400			
				200			
				300			
				400			
				500			
				600			
				700			
				800			
				900			
				1000			
				1100			
				1200			
				1300			
				1400			
				1500			
				1600			
				1700			
				1800			
				1900			
				2000			
				2100			
				2200			
				2300			
				2400			
				2500			
				2600			
				2700			
				2800			
				2900			
				3000			
				3100			
				3200			
				3300			
				3400			
				3500			
				3600			
				3700			
				3800			
				3900			
				4000			
				4100			
				4200			
				4300			
				4400			
				4500			
				4600			
				4700			
				4800			
				4900			

Dredge } No. 6709 Date 11-10-1906  
Hydrog. } 1906

Sdg. Atm. ~~100.00~~ Reel Blank Leads lbs.

Turns ~~100~~ Cor'n ~~100~~ Depth 10 fms.

Sdg. Cup ~~100~~ Amt. Bot'm Sample

Character of bottom ~~100~~

Thermom. { Make Cor'n { Instr.  
No. , Stem.

Bottom Reading Cor'd. Temp.

Temp. Surf. { 80° Time 10.17 } Air { 85°  
80° Time 10.33 }

Density: Surf. 102346 fms.

Wind: Direction Force 3

Baromet. 40.00 Amt. of Clouds 1/4 State of Sea 0 

Weather ~~Ice~~

Direction and Force of Current { Surface  
Bottom

Tide

General Locality

Position 10°

Chart used: No. Rd'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer ~~100~~ Recorder ~~100~~ 11-1023

SOUNDING WIRE			FMS.	DREDGING CABLE		
M.	Down.	Up.	M.	M.	Up.	M.
			0	14	10	10
			100	12	12	10
			200	10	26	30
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge } No. 4712 Date, June 19, 1901  
Hydrog. }

Sdg. Mch. Reel' Shot } Lead } lbs.

Turns 20 Cor'n 12 Depth 12 fms.

Sdg. Cup 20 Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 8 Time 10.15' { Air { 84°  
80° Time 19.55' Stem.

Density: Surf. 1.02386 fms.

Wind: Direction East Force 3

Baromet. 30.00 Amt. of Clouds State of Sea

Weather

Direction and Force { Surface  
of Current. Bottom

Tide

General Locality

Position  $47^{\circ} 13' N$   $27^{\circ} 11' E$

Chart used: No. 4240 Ed'n

Drift: Direction  $N 11^{\circ} W$  Slip Distance

Depth of Haul

Apparatus and Rig used

20 fms.

Time towing 1 h. 11 m.

Remarks:

Deck Officer John T. Miller Tether Recorder John T. Miller 11-1023

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. DOWN.	UP.	M.	M.	UP.	M.
		0	10	41	10
		100	1	43	20
		200			
		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1300			
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		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			

Tides

General Locality - China Sea.

Exhibit 47-68, Section 20 (S) and 21-3-5.

Position 13° 31.1' S, -120° 25.5' W

Chart used: No. CS 4240 Ed'n Feb. 27  
Dir't: Direction N 20 E Distance 6 1/2

Depth of Hank

### Apparatus and Rigs used. /2

## • 37 • *— The Second Part —*

Time towing ~~over~~ to ~~the~~ h. 10 mt.

Remarks: Not seen and 100% dead.

Deck Officer (or) *Deck Officer (or) Recorder*

## SOUNDING WIRE.

M.	DOWN.	UP.	M.
----	-------	-----	----

17	20	3	19	5	3
----	----	---	----	---	---

18	10	1	18	10	1
----	----	---	----	----	---

18	30	3	18	30	3
----	----	---	----	----	---

FMS.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4100

4200

4300

4400

4500

4600

4700

4800

4900

## DREDGING CABLE.

M.	DOWN.	UP.	M.
----	-------	-----	----

12	4	2	54	3	8
----	---	---	----	---	---

26	40	3	51	2	0
----	----	---	----	---	---

27	35	3	46	5	0
----	----	---	----	---	---

32	—	3	42	—	—
----	---	---	----	---	---

Dredge } No. 5111 Date, 16 Jan 1906  
Hydrog } Sdg. Mch. T. N. Reel T. N. Shot } 30 lbs.

Turns 25 Cor'n Depth 236 fms.

Sight water cups Amt. Bot'm Sample

Sdg. Cup Dredge, A. Sample

Character of Bottom *Shallow* (On N. in marshy)

Thermom. { Make N. L. Instr.  
No. 108022 Cor'n Stem.

Bottom Reading Therm. 75.5° Gor'd. Temp.

Temp. Surf. { 80° Time 1.52 p.m. Air 84°  
80° Time 3.55 p.m. Air 82.5°

Density: Surf. fms.

Wind: Direction East Force 3

Baromet. 29.75 Amt. of Clouds 1 State of Sea S.

Weather *hazy*

Direction and Force { Surface  
of Current. Bottom

Tide

General Locality Batagan P. I.

Cape Cantabago At. 78° 11' N. San Pedro P. I., Batagan

Position 12° 45' 11" N. - 120° 46' 30" E. A 550 fms.

Chart used: No. 4240 C. S. Ed'n 2 Feb. 07.

Drift: Direction N. E. Distance 1.5 miles

Depth of Haul Bottom

Apparatus and Rig used As before

Time towing h. 30 m.

Remarks: Sounding only being the main object of the trip

Deck Officer W. J. Gaskins Recorder T. N. 11-1023

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
M.	DOWN.	UP.	M.		M.	DOWN.	UP.	M.
7.	36	10	2	47	50	0	7	50
	37	10		45	20	100	57	30
	37	50		42	50	200	57	50
2	38	20	2	41	20	300	53	01
						400	04	40
						500	08	00
						600		
						700		
						800		
						900		
						1000		
						1100		
						1200		
						1300		
						1400		
						1500		
						1600		
						1700		
						1800		
						1900		
						2000		
						2100		
						2200		
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						2400		
						2500		
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						2700		
						2800		
						2900		
						3000		
						3100		
						3200		
						3300		
						3400		
						3500		
						3600		
						3700		
						3800		
						3900		
						4000		
						4100		
						4200		
						4300		
						4400		
						4500		
						4600		
						4700		
						4800		
						4900		

Dredge No. 5115 Date, June 17, 1902

Hydrog. Sdg. Mch. 1000 ft. Reel 1000' Shot 30 lbs.

Turns 156 cor'n 29 Depth 177 fms.

Sdg. Cup 1000 ft. Amt. Bot'm Sample 0.00

Character of Bottom ~~dark~~ 12

Thermom. { Make -13  
No. 108022 cor'n { Instr. -13  
Stem. -5

Bottom Reading 53° Cor'd Temp. 52.4

Temp. Surf. { 80° Time 2.20 } Air { 86°  
50° Time 3.10 } 84

Density: Surf. 1.02416 bottom 1.02496

Wind: Direction S.E. Force 2

Baromet. 30.07 Amt. of Clouds ? State of Sea

Weather ~~gray~~

Direction and Force of Current { Surface  
Bottom

Tide

General Locality Between Guyana 11.65°

Latitude 18° S., on 1/2° W., 2268' d.

Position Lat 18° 46' S. 22° W. 1000' 45" S. 22°

Chart used: No. 4240 C.S. Ed'n Feb., 1907

Drift: Direction N. 13° E. Distance 1/4 miles

Depth of Haul bottom

Apparatus and Rig used 12' Tammes, 3' dredge

Time towing h. m.

Remarks:

Deck Officer

Recorder

11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.			
7' M.	Down.	Up.	7' M.	2' M.	Down.	Up.	7' M.
7	4	2	0	14	30	3	09
8	65	30	100	17	40	3	06
9	740	0	273 + 177	21	10	3	03
			300	2	30	3	00
			400	2	20	2	00
			500	2	30	2	00
			600				
			700				
			800				
			900				
			1000				
			1100				
			1200				
			1300				
			1400				
			1500				
			1600				
			1700				
			1800				
			1900				
			2000				
			2100				
			2200				
			2300				
			2400				
			2500				
			2600				
			2700				
			2800				
			2900				
			3000				
			3100				
			3200				
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			3800				
			3900				
			4000				
			4100				
			4200				
			4300				
			4400				
			4500				
			4600				
			4700				
			4800				
			4900				

Dredge } No. 111 Date, 19  
Hydrog }  
Sdg. Mech. T. W. Reel T. W. Shot } 35 lbs.  
Turns 166 Cor'n 7 Depth 159 fms.  
Sdg. Gun 1000 Lb. Amt. Bot'm 10 m.  
Character of Bottom  
Thermom. { Make \_\_\_\_\_ Cor'n { Instr. \_\_\_\_\_  
No. \_\_\_\_\_ Stem. \_\_\_\_\_  
Bottom Reading \_\_\_\_\_ Cor'd Temp. \_\_\_\_\_  
Temp. Surf. { 80° Time 3.50 { 0.1  
80° Time 4.25 Air { 80  
Density: Surf. 1.02413 fms.  
Wind: Direction S.E. Force 2  
Baromet. 29.76 Amt. of Clouds 9 State of Sea  
Weather very

Direction and Force { Surface  
of Current. Bottom

Tide

General Locality China Sea

Position 15° 51' S. 120° 15' E.

Chart used: No. 111 Ed'n

Drift: Direction 77° 9' Distance 1000

Depth of Haul 7 fathoms

Apparatus and Rig used

Time towing h. 10 m.

Remarks: The weather was very bad in the afternoon had been down about 75 miles to about 10 fms. wind E. N.E.

Mid 1 1 0 1

Deck Officer Recorder 11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. Down.	Up.	M.		M. Down.	Up.	M.
3	1	5	0	3	5	5
3	1	5	100	3	5	5
3	2	0	200	3	5	5
			300	4	0	12
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
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			2500			
			2600			
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			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
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			4700			
			4800			
			4900			

Dredge } No. 511 Date, Oct 1, 1911  
Hydrog. }

Sdg. Mch. 2000 Reel 2000 Shallow Leads 30 lbs.

Turns 200 Cor'n N Depth 340 fms.

Sdg. Cup 2000 Amt. Bait'm Sample 2000

Character of Bottom Fine S.

Thermom. { Make 10 thermometers Cor'n Instr.  
No. 10 thermometers Cor'n Stem.

Bottom Reading 200 thermos. Cor'd Temp.

Temp. Surf. { 79° Time 11:00 am Air 81 1/2°  
50° Time 11:45 am Air 84°

Density: Surf. 1.02447 fms.

Wind: Direction ESE Force 3

Baromet. 30.28 Amt. of Clouds State of Sea

Weather Sc

Direction and Force of Current { Surface  
Bottom

Tide

General Locality Hail Is. S. E.

Coordinates N 36° E, Dist. about 100 m.

Position 12° 26' 11" N, 120° 45' 15" E, Lat., Long.

Chart used: No. 5240 U.S. Ed'n 186. 07.

Drift: Direction N 36° E. Distance 100 m.

Depth of Haul Bottom

Apparatus and Rig used

Time towing 2 h. 20 m.

Remarks: Found 500 m. of wire.

Found 100 m. of wire.

Deck Officer C. H. Ladd, Recorder J. C. Ladd

SOUNDING WIRE.			FMS.	DREDGING CABLE.					
M.	DOWN.	UP.	M.	M.	DOWN.	UP.	M.		
10	46	00	10	58	30	10	54	00	
	46	45	58	45		100	52	50	
	47	30	58	35		200	45	50	
	47	15	58	25		300	38	35	
12	47	15	58	15	300	12	00	41	30
					400	16	00	37	50
					400	11	10	36	50
					700				
					800				
					900				
					1000				
					1100				
					1200				
					1300				
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					3900				
					4000				
					4100				
					4200				
					4300				
					4400				
					4500				
					4600				
					4700				
					4800				
					4900				

Dredge } No. 27/16 Date, 12/12, 1941  
 Hydro }  
 Sdg. Meth. Reel No. 1000 Shot } 30 lbs.  
 Leaf }  
 Turns 340 Cor'n ~~~~~ Depth 340 fms.  
 Sdg. Cup ~~~~~ Amt. Bot'm Sample ~~~~~  
 Character of Bottom ~~~~~  
 Thermom. { Make 117 Cor'n { Instr.  
 No. 1050222 Stem.  
 Bottom Reading 47.06 Cor'd Temp.  
 Temp. Surf. { Time 1, 20' { Air } 55'  
 { Time 1, 10' {  
 Density: Surf. 1.024 24 fms. 1.025 57  
 Wind: Direction E Force N  
 Baromet. 29.92 Amt. of Clouds 12 State of Sea  
 Weather ~~~~~

Tide

General Locality Verde D.J. Pima Co.

---13---37---11---N, ---120---43---48---E

Position: *Sombrano* (2), N. 41. Max. elevation 1100. Slope 1000'.

Chart used: No. 4240 Ed'n

Drift: Direction N. 43° E. Distance 1

Depth of Haul. Bottom

#### Apparatus and Rigging 17

Almond blossom, 3000 ft. 2000 ft.

UNIVERSITY

1920-1921

### Deck Officer

Deck Officer 1 Recorder 1 11-1023

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
M.	DOWN.	UP.	M.		M.	DOWN.	UP.	M.
1	04	10	1	12	18	0	1	19
1	05	00	1	11	20	100	1	22
1	06	00	1	10	30	200	1	25
1	07	00	1	09	30	300	1	29
1	07	30	1	09	10	400	1	31
						500	1	36
						600	1	38
						700	1	41
						800		
						900		
						1000		
						1100		
						1200		
						1300		
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						4700		
						4800		
						4900		

Dredge } No. 15116 Date, Jan. 20, 1908

Hydrometer Reel Number Shot } 30 lbs.

Turns 200 Cor'n 200 Depth 200 fms.

Dredge Cup Scapular Amt. Bot'm Sample

Character of Bottom

Thermom. { Make H. G. Cor'n { Instr. 13  
No. 105062 Cor'n { Stem. 5

Bottom Reading 50.8 Cor'd Temp. 50.2

Temp. Surf. { 60° Time 3:02 } Air { 86°  
82° Time 86°

Density: Surf. 1.02426 fms.

Wind: Direction E Force 1

Baromet. 27.7 Amt. of Clouds 6 State of Sea

Weather Sog

Direction and Force of Current { Surface  
Bottom

Tide

General Locality Undept. Passage

Latitude 41° 47' N. Longitude 120° 47' E.

Position 41° 47' 00" N. 120° 47' 05" E.

Chart used: No. 4740 Ed'n

Drift: Direction N. 5° S. Distance  $\frac{1}{2}$  mi.

Depth of Haul Bottom

Apparatus and Rig used as described

Time towing 1 h. 29 m.

Remarks: The lower part of the fish haul was very thin.

Deck Officer C. E. C. Recorder C. E. C. (1-1023)

SOUNDING WIRE				FMS.	DREDGING CABLE			
P.	M.	DOWN.	UP.		P.	M.	DOWN.	UP.
2	57	10	2	57	10	0	3	01 30 3 44 50
2	57	53	2	56	16	100	3	05 00 3 41
2	52	45	2	55	13	200	3	08 10 3 38 25
				300		3 11 50	3	12
				400		3 13 20	3	14
				500				
				600				
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				4900				

Dredge No. 517 Date, Jan 21, 1988

Sdg. Mch. 517 Reel 1 Shot Lbds. lbs.

Turns 124 Cor'n 120 S = 117 fms. Depth 118 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom 1200 ft. dr.

Thermom. Make of Cor'n Instr. No. Stem

Bottom Reading Cor'd Temp.

Temp. Surf. 74° Time 7:15 A.M. Air 82°  
9:01 Time 9:01 A.M. 9:01

Density: Surf. 1.02475 fms.

Wind: Direction S. Force 1

Baromet. 29.94 Amt. of Clouds 9 State of Sea 8

Weather very

Direction and Force of Current. Surface  
Bottom

Tide

General Locality 20° S. Lat.

Position 120° 55' E. Long. 120° 00' S. Lat.

Chart used: No. 4210 C.G. Ed'n 5 1. 7

Drift: Direction N. E. 30° Distance 3 miles

Depth of Haul bottom

Apparatus and Rig used 200 ft. wire

Time towing 1 h. 22.8 m.

Remarks: 21.1 m. 20.6 m. 20.3 m.

Deck Officer Recorder

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
M.	DOWN.	UP.	M.		M.	DOWN.	UP.	M.
9	9	20	9	14	00	0	9	18
9	10	-	-			100	2	2
9	10	20	9			200	7	27
						300	7	26
						400	35	9
						500		
						600		
						700		
						800		
						900		
						1000		
						1100		
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Dredge } No. 5118 Date, July 21<sup>st</sup>, 19<sup>th</sup>  
Hydrog. } Sdg. Mch. Tons Reel 2.71. Shot } 50 lbs.  
Turns 166 cor'n 1665 = 159 fms Depth 159 fms.  
Sdg. Cup } Amt. Bot'm Sample cup in  
Character of Bottom } dk sand m.

Thermom. { Make 751 Cor'n { Instr.  
No. 100 Stem.

Bottom Reading Cor'd Temp.  
Temp. Surf. { 79 Time 1050 AM 81  
79 Time 11 PM Air 81

Density: Surf. 1.02426 fms.

Wind: Direction Force  
Baromet. 29.92 Amt. of Clouds 8 State of Sea

Weather Bcy

Direction and Force { Surface  
of Current. Bottom

Tide

General Locality China Sea

Position 15° 44' S - 115° 11' E 120° 41' S 115° 10' E

Position 15° 44' S - 115° 11' E 120° 41' S 115° 10' E

Chart used: No. 42410 S. Edn Feb. 1917

Drift: Direction N 50° W Distance 3/4 m.

Depth of Haul bottom

Apparatus and Rig used as before

Time towing ~ h. 30 m.

Remarks: Net over bottom at 296 fms.

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
CL M.	DOWN.	UP.	CL M.	CL M.	DOWN.	UP.
	37	12	0	13	50	11
	100	100	100	13	50	11
	200	189 <sup>29°</sup>	200	13	50	11
	300		300	57	50	11
	400		400			
	500		500			
	600		600			
	700		700			
	800		800			
	900		900			
	1000		1000			
	1100		1100			
	1200		1200			
	1300		1300			
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	2800		2800			
	2900		2900			
	3000		3000			
	3100		3100			
	3200		3200			
C	C		3300			
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			4900			

Dredge } No. 5119. Date, 21. Jan., 1911

Hydro } Sdg. Mch. Tugman Reel Tug. Shot } 30 lbs.

Turns 394 Cor'n none Depth 50 fms.

Sdg. Cup & net, Amt. Bot'm Sample Avg. Silt.

Character of Bottom gr. TTS.

Thermom. { Make N.Z. Cor'n { Instr. -1  
No. 108022 Cor'n { Stem. -64

Bottom Reading 44.4 Cor'd Temp. 43.7

Temp. Surf. { 80° Time 1:38 p.m. Air { 82°  
80° Time 2:30 p.m. Air { 72°

Density: Surf. 1.0235 fms. 1.0246

Wind: Direction S.E. Force 4

Baromet. 29.82 Amt. of Clouds 4 State of Sea S.

Weather Tc.

Direction and Force { Surface  
of Current. { Bottom

Tide

General Locality China Sea.

Position 13° 45' S. 100° 30' E. A 35° W

Chart used: No. 4240 C.S. Ed'n Feb'y 25.

Drift: Direction 172-3° E. Distance 1 mile.

Depth of Haul Bottom

Apparatus and Rig used 12 Tons, 200 fms. to 5 fms. fine mudbox. 20 fms. of wire.

Remarks: 750 fms. bottle used at soundings.

Trawl took bottom 100 fms. of wire.

Time towing - hr. 09 m.

SOUNDING WIRE.			FMS.	DREDGING CABLE.			
P.	M. DOWN.	UP.	Q. M.	P.	M. DOWN.	UP.	Q. M.
1	20 10	1 15 50	0	1	37 40	2 25	40
21 25	29 00		100	41	15	22 10	
22 20	28 20		200	44	35	18 50	
23 20	27 20		300	47	50	15 25	
1 24 25	1 27 20	3 14 400		51 00	18 25		
			500	54 30	07 30		
			600 550	56 20	2 05 00		
			700				
			800				
			900				
			1000				
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			4700				
			4800				
			4900				

Dredg. No. 21 Date, 21 January, 1918  
 Hydrog. Sdg. Mech. Grav. Reel S. S. ~ Shot Lead 30 lbs.  
 Turns 392 Cor'n 200' Depth 393 fms.  
 Sdg. Cup Sampler Amt. Bot'm Sample Cup S. L.  
 Character of Bottom Gravel

Thermom.	Make	Cor'n	Instr.
No.	Ja. T. T. S.	Cor'n	Stem.

Bottom Reading 44.4° Cor'd Temp.

Temp. Surf.	80° Time 2:57 p.m.	Air 82°
	80° Time 3:49 p.m.	Air 80°

Density: Surf. 1.0234 fms. 1.0244 fms.

Wind: Direction E by S Force 4

Baromet. 29.80 Amt. of Clouds 8 State of Sea C.

Weather 23.

Direction and Force of Current. Surface  
 Bottom

Tide

General Locality China Sea.  
 Name of C. N. S. G. C. (C. N. S. G. C.)  
 Position 13° 45' N, 120° 30' E. S. C. C.  
 Chart used: No. 420 CS Edn. Feb. 1912.  
 Drift: Direction 5° N Distance 10 miles.  
 Depth of Haul 30 fms. Lat. 30° N.  
 Apparatus and Rig used 10' T. C. 200' C. R. R. R. R.

Time towing — hr. 20 m.

Remarks: Seston & water bottle used in sea 23.

Deck Officer, W. H. Head

Recorder, G. W. T. —

SOUNDING WIRE.				FMS.	DREDGING CABLE.				
0	M. DOWN.	UP.	0	M.	0	M. DOWN.	UP.	0	M.
2	34	40	2	45	487	0	2	47	00
	36	45		44	45	100	3	59	20
	38	45		43	45	200	3	03	00
2	39	23		42	427	300	06	30	33
	40	50	2	41	00	392	400	10	00
					500				
					600				
					700				
					800				
					900				
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					1200				
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OK. No. 191, 1911, 1911

Dredge } No. 191, 1911

Date, 1911

, 1911

Sdg. Mech.

Reel

Shot

lbs.

Turns 239 Cor'n 19 Depth 40 fms.

Sdg. Cup Amt. Bot'm Sampled

Character of Bottom

Thermom. { Make ~~id~~ Cor'n { Instr. —  
No. None + ~~id~~ Cor'n { Stem. —

Bottom Reading Cor'd Temp. —

Temp. Surf. { 79° Time 10.45 A.M. } Air { 78°  
79° Time 11.20 } 78°

Density: Surf. 1.02489 fms.

Wind: Direction 05 N. W. Force 4

Baromet. 29.70 Amt. of Clouds State of Sea

Weather

Direction and Force of Current { Surface  
Bottom

Tide

General Locality Ok. No. 191, 1911

Position 13° 21' 30" N 70° W. 121° 33' 13" E.

Chart used: No. 4714 C.S. Ed'n

Drift: Direction S 57° Distance 1.25 m.

Depth of Haul bottom

Apparatus and Rig used 12' Trawl net, 20 m. diameter

Trawl net weight, 2 tail weight

Time towing h: 20 m.

Remarks: 1. 2. 3. 4.

Deck Officer Recorder

11-1023

SOUNDING WIRE				FMS.	DREDGING CABLE			
M.	DOWN.	UP.	M.		M.	DOWN.	UP.	M.
10	83	10	1039	00	100	10	48	20
10	34	00	10	36	00	200	10	32
					300	32	33	33
					400	36	46	46
					500	37	47	47
					600	39	49	49
					700			
					800			
					900			
					1000			
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SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. DOWN.	UP.	M.		M. DOWN.	UP.	M.
✓ 102 00	5	15 120	0	✓ 10 20	6 12	00
02	17		100	21	09	18
103 35	09 30		200	27	07	20
07 25	06 10		300	31	02	20
✓ 09 40	✓ 05 10	✓ 240	400	36	17	20
			500	37	15	20
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
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			4800			
			4900			

Ok.

Dredge } No. 57121 Date, Oct 5<sup>th</sup> 1911  
Hydrog. }  
Sdg. Mch. T. Reel Shot  
Turns Cor'n Depth 7 d 2 fms.  
Sdg. Cup Amt. Bot'm Sample  
Character of Bottom soft grn

Thermom. { Make 7123  
No. 1081546 Cor'n { Instr. - 0.2  
Stem. - 0.5

Bottom Reading 50.2 Cor'd Temp. 49.5

Temp. Surf. { 80° Time 1:25 P.M. Air { 83°  
20° Time 2:15 12°

Density: Surf. - 2 fms. 2

Wind: Direction N Force 1-2

Baromet. 30.05 Amt. of Clouds 9 State of Sea

Weather

Direction and Force of Current { Surface  
Bottom

Tide 11.75 m.

General Locality

Balibat Pt S 31° E a

Position 11° 12' N 120° 10' E

Chart used: No. 1718 C.S. Ed'n

Drift: Direction 70° 10' Distance

Depth of Haul Bottom

Apparatus and Rig used

Time to wind h. m.

Remarks: Net first dr

Deck Officer: Recorder: 11-1023

SOUNDING WIRE.					FMS.	DREDGING CABLE.						
M.	DOWN.	UP.	M.			M.	DOWN.	UP.	M.			
12	59	10	1	16	05	0	1	23	50	2	59	16
	-	5	1	15	10	100	1	28	-	7	-	-
	-	55	1	14	15	200	1	-	-	-	-	-
	-	-	1	15	15	300	1	-	-	-	3	-
	-	-	-	12	-	400	1	-	-	-	-	-
	03	50	1	11	-	500	1	42	55	2	-	-
	04	50	1	09	20	600	1	-	-	-	-	-
	05	-	1	08	40	700	1	-	-	-	-	-
	05	30	1	08	20	700	1	-	-	-	-	-
						800	1	-	-	-	-	-
						900	1	-	-	-	-	-
						1000	1	-	-	-	-	-
						1100	-	-	-	-	-	-
						1200	-	-	-	-	-	-
						1300	-	-	-	-	-	-
						1400	-	-	-	-	-	-
						1500	-	-	-	-	-	-
						1600	-	-	-	-	-	-
						1700	-	-	-	-	-	-
						1800	-	-	-	-	-	-
						1900	-	-	-	-	-	-
						2000	-	-	-	-	-	-
						2100	-	-	-	-	-	-
						2200	-	-	-	-	-	-
						2300	-	-	-	-	-	-
						2400	-	-	-	-	-	-
						2500	-	-	-	-	-	-
						2600	-	-	-	-	-	-
						2700	-	-	-	-	-	-
						2800	-	-	-	-	-	-
						2900	-	-	-	-	-	-
						3000	-	-	-	-	-	-
						3100	-	-	-	-	-	-
						3200	-	-	-	-	-	-
						3300	-	-	-	-	-	-
						3400	-	-	-	-	-	-
						3500	-	-	-	-	-	-
						3600	-	-	-	-	-	-
						3700	-	-	-	-	-	-
						3800	-	-	-	-	-	-
						3900	-	-	-	-	-	-
						4000	-	-	-	-	-	-
						4100	-	-	-	-	-	-
						4200	-	-	-	-	-	-
						4300	-	-	-	-	-	-
						4400	-	-	-	-	-	-
						4500	-	-	-	-	-	-
						4600	-	-	-	-	-	-
						4700	-	-	-	-	-	-
						4800	-	-	-	-	-	-
						4900	-	-	-	-	-	-

Dredge No. 57128 Date, 21. 11. 1921  
Hydrog. } Sdg. Mch. Reel Shot } Lead } lbs.

Turns Cor'n Depth fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Cor'n { Instr.  
No. Cor'n { Stem.

Bottom Reading Cor'd. Temp.

Temp. Surf. { 60° Time 7.25 } Stir { 8°  
80° Time 7.26 } 52°

Density: Surf. fms.

Wind: Direction W. N. E. Force 1

Baromet. 29.70 Amt. of Clouds 8 State of Sea

Weather

Direction and Force of Current { Surface  
Bottom

Tide

Noyas. Id. (W) N 6° E. 32.5 mi.

General Locality

Position 1° 52' N 121° 42' E

Chart used: No. 4718 C.S. Ed'n. Dec 1906.

Drift: Direction S 6° E. Distance 6

Depth of Haul Surface

Apparatus and Rig used

Time towing h. 2.0 m.

Remarks:

Deck Officer M. L. C. Recorder C. E. H. D. Lang  
N-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.			
M. DOWN.	UP.	M.		P	M. DOWN.	UP.	P
			0	7	05	30	7
			100				45
			200				00
			300				
			400				
			500				
			600				
			700				
			800				
			900				
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Okp.

Dredge No. 1 Date, 15.11.1911  
Hydrog. Sdg. Mech. T. Weller Reel 100 fms. Shot 20 lbs.  
Turns 102 Cor'n none Depth 102 fms.  
Sdg. Cup Signature Amt. Bot'm Sample (in L. & C. material)  
Character of Bottom  
Thermom. { Make W.C. Cor'n { Instr. -3  
No. 108023 Stem -0.3  
Bottom Reading 59.8 Cor'd Temp. 59.2  
Temp. Surf. { 79.5 Time 3.47 Air { 81.2  
26.5 Time 4.50 Air 80.2  
Density: Surf. 1.02447 Lat. 11° 41' fms. 102.951  
Wind: Direction N.E. Force 3  
Baromet. 29.97 Amt. of Clouds 5 State of Sea  
Weather 26

Direction and Force of Current. { Surface  
Bottom

Tide

Debungeni Pt N 10W, 9 m.

General Locality Sulu Sea, Penanungan Bay  
Position 11° 41' N. Lat. 102° 46' E. Long.

Position 11° 41' N. Lat. 102° 46' E. Long.

Chart used: No. C.S. 472 Ed'n 5

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used 9' 15.5 ft, 2 fathoms, 1  
tow line, 200 ft.

Time towing — h. — m.

Remarks: The drift was in the direction of the intended course, the drift to port, which is to be expected, and had been anticipated, previous to the registration of drift at 280 fms. The wind, which was at 10 m.p.h. when the drift was registered, had increased to 15 m.p.h. when the drift was registered. The drift, as the name suggests, was to port, so the wind was to port.

Deck Officer, T. W. Weller Recorder, F. C. H. —  
11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M.	DOWN.	UP.	M.	M.	UP.	M.
2	40	3	0	2	30	0
20	15	30	100	20	30	100
20	20	30	200	20	20	200
			300	2	10	80
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
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			4700			
			4800			
			4900			

Hydrog. No. 4899 Date, 1. 1. 1901

Sdg. Mech. Reel Shanty Lead 30 lbs.

Turns 12 Cor'n 000000 Depth 10 fms.

Sdg. Cup Lead Amt. Bot'm Sample

Character of Bottom sand, mud

Thermom. { Make Zorn Cor'n { Instr.  
No. 2000 Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 2 Time } Air { 2 Time }

Density: Surf. fms.

Wind: Direction Force

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force of Current. { Surface  
Bottom

Tide

Lat. 34° 58' S. Long. 178° W. 3 mi.

General Locality

Position 34° 58' S. 178° W.

Chart used: No. 1101 Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer M. L. C. Recorder C. G. Lang.  
11-1029

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. DOWN.	UP.	M.		M. DOWN.	UP.	M.
8 48 10	8 49 00		100			
8 48 20	8 48 30		200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Ok Pl.

Instrument } No. 27 Date, 1908, 2, 1908  
Hydrog. } Reel 1 Sheet 30 lbs.

Sdg. Mech. 15 Reel 1 Sheet 30 lbs.  
Sdg. Cup Amt. Bot'm Sample 1

Character of Bottom

Thermom. { Make 2 Cor'n { Instr.  
No. 20 Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 2 Time } Air { 2  
2 Time } Air { 2

Density: Surf. fms.

Wind: Direction Force

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force { Surface  
of Current. Bottom

Tide

Off Pt. West, 3 mi

General Locality

Position

1020

Chart used: No. 4644 C. & G. Rd'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer Mrs. Knitter Recorder

11-1021

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
C. M. DOWN.	UP.	M.		M. DOWN.	UP.	M.
858	08	5640	0			
1558	10	5724	100			
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Hydrog. } No. Date, 1907  
Hydrog. } No. Date, 1907

Sec. Mch. Reel Shot Lead lbs.

Turns Cor'n Depth fms.

Sec. Cup Int. Balm Sample

Character of Bottom

Thermom. Make Cor'n Instr.  
No. Cor'n Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. Time Air  
Time

Density: Surf. fms.

Wind: Direction Force

Baromet. Amt. of State of  
Clouds Sea

Weather

Direction and Force of Current Surface  
of Current Bottom

Tide

St. 152 W. 3 mi.

General Locality

Position

Chart used: No. 4644 C. S. Ed'n

Drift: Direction Distance

Depth of Haul

Apparatus and Rig used

Time towing h. m.

Remarks:

Deck Officer Recorder 11-1023

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. DOWN.	UP.		M.	UP.	M.
0					
100					
200					
300					
400					
500					
600					
700					
800					
900					
1000					
1100					
1200					
1300					
1400					
1500					
1600					
1700					
1800					
1900					
2000					
2100					
2200					
2300					
2400					
2500					
2600					
2700					
2800					
2900					
3000					
3100					
3200					
3300					
3400					
3500					
3600					
3700					
3800					
3900					
4000					
4100					
4200					
4300					
4400					
4500					
4600					
4700					
4800					
4900					

Ok. Pl.

Bridge Hydrog. } No. 4902 Date, Feb. 1, 1900

*Sdg. Mech.* *Reel* *7.55* *Shake* *30* *lbs.*

Turns       $\frac{\text{deg}}{\text{sec}}$       Cor'n       $\frac{\text{deg}}{\text{sec}}$       Depth       $\frac{\text{fms.}}{\text{sec}}$

Sdg. Cup tallit on land Amt. Bot'm Sample Abt. 1 ince  
Character of Bottom gr. M. fine

Thermom. { Make Z Cor'n { Instr.  
No. C. Stem.

$$\left. \begin{array}{c} \text{Temp. Surf.} \\ \text{Time} \end{array} \right\} \quad \left. \begin{array}{c} \text{Time} \\ \text{Time} \end{array} \right\} \quad \left. \begin{array}{c} \text{.fir} \\ \text{.fir} \end{array} \right\}$$

Density: Surf. .... fms. ....

Wind: Direction ..... Force

*Baromet.* *Amt. of Clouds* *State of Sea*

### Weather

*Direction and Force of Current.* { *Surface*  
*Bottom*

Tide ~~10.00~~ 10.15 N 31° W, 5' wave

### *General Locality*

Position  $\theta = 0^\circ, 30^\circ, 60^\circ, 90^\circ, 120^\circ, 150^\circ, 180^\circ$

Chart used: No. 4644 C. Ed'n.

*Drift: Direction*      *Distance*

*Depth of Haul* . . . . .

### *Apparatus and Rig used*

### Remarks

### *Deck Officer*

### Recorders

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. DOWN.	UP.		M.	UP.	M.
0					
200					
300					
400					
500					
600					
700					
800					
900					
1000					
1100					
1200					
1300					
1400					
1500					
1600					
1700					
1800					
1900					
2000					
2100					
2200					
2300					
2400					
2500					
2600					
2700					
2800					
2900					
3000					
3100					
3200					
3300					
3400					
3500					
3600					
3700					
3800					
3900					
4000					
4100					
4200					
4300					
4400					
4500					
4600					
4700					
4800					
4900					

Ok Pl

Dredge No. 6700 Date, 1905

Sdg. Mch. 2000 Reel 700 Shot Lead lbs.

Turns 27 Cor'n 27 Depth 27 fms.

Sdg. Cup ~~fallows on lead~~ Amt. Bot'm Sample

Character of Bottom

Thermom. { Make Instr.  
No. 2 Stem.

Bottom Reading 24 Cor'd Temp.

Temp. Surf. { 79° Time 9.24 } Air { 68°  
79° Time 9.42 }

Density: Surf. 1.02447 fms.

Wind: Direction E N.E. Force 1

Baromet. Amt. of Clouds 7 State of Sea

Weather

Direction and Force of Current { Surface  
Bottom

Tide

Ad. 8.12 m. 3 ft N. 22° 4 mil.

General Locality

No. latitude 4° 8' at taken

Position N. 4° 8' W. 120° Lat. 4° 8' W. 120°

Chart used: No. 14 Ed'n 1905 Scale 1:62500

Drift: Direction 345° Distance

Depth of Haul 10 fms.

Apparatus and Rig used T

swallow, 2 ton

5

Time towing h. / m.

Remarks:

Deck Officer Mr. Firetta Recorder C. C.

SOUNDING WIRE.			FMS.	DREDGING CABLE.					
Q	M. DOWN.	UP.	?	Q	M. DOWN.	UP.	?	M.	
			0	9	23	00	9	48	00
	9	14	30	9	26	40	8	39	35
			200						
			300						
			400						
			500						
			600						
			700						
			800						
			900						
			1000						
			1100						
			1200						
			1300						
			1400						
			1500						
			1600						
			1700						
			1800						
			1900						
			2000						
			2100						
			2200						
			2300						
			2400						
			2500						
			2600						
			2700						
			2800						
			2900						
			3000						
			3100						
			3200						
			3300						
			3400						
			3500						
			3600						
			3700						
			3800						
			3900						
			4000						
			4100						
			4200						
			4300						
			4400						
			4500						
			4600						
			4700						
			4800						
			4900						



## SOUNDING WIRE.

M. DOWN, | UP, M.

FMS.

## DREDGING CABLE.

M. DOWN, UP, M.

0	2	5-1	00	10	17	10
100						
200						
300						
400						
500						
600						
700						
800						
900						
1000						
1100						
1200						
1300						
1400						
1500						
1600						
1700						
1800						
1900						
2000						
2100						
2200						
2300						
2400						
2500						
2600						
2700						
2800						
2900						
3000						
3100						
3200						
3300						
3400						
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3600						
3700						
3800						
3900						
4000						
4100						
4200						
4300						
4400						
4500						
4600						
4700						
4800						
4900						

5134

Dredge } No. ~~5134~~ Date, 19 Date, 19  
Hydrog. } Sdg. Mch. Reel 5 lbs.  
Sdg. Cup } Amt. Bot'm Sample  
Character of Bottom S.  
Thermom. { Make N. Z. Instr. -14  
No. 108023 Cor'n { Stem. +0.08  
Bottom Reading 78.5 Cor'd. Temp. 78.1°  
Temp. Surf. { 78° Time 7:15 A.M. Air { 82°  
78° Time 2 P.M.  
Density: Surf. 1.02497 fms.  
Wind: Direction S.E. Force 1  
Baromet. 29.82 Amt. of Clouds 2 State of Sea S.  
Weather 70° C.

Direction and Force of Current { Surface  
Bottom

Tide N 85° 59' W. 6.25

General Locality Sulu Sea

Position 6° 14' - 54° 12' 47.54

Chart used: No. CS. 4511 Ed'n

Drift: Direction S 42 W Distance

Depth of Haul 1 bottom

Apparatus and Rig used as before

Time towing — h. 2 m.

Remarks:

## SOUNDING WIRE.

FMS.

M. DOWN. | UP. M.

7	17	7	0
7	18	20	0
			200
			300
			400
			500
			600
			700
			800
			900
			1000
			1100
			1200
			1300
			1400
			1500
			1600
			1700
			1800
			1900
			2000
			2100
			2200
			2300
			2400
			2500
			2600
			2700
			2800
			2900
			3000
			3100
			3200
			3300
			3400
			3500
			3600
			3700
			3800
			3900
			4000
			4100
			4200
			4300
			4400
			4500
			4600
			4700
			4800
			4900

## DREDGING CABLE.

M. DOWN. | UP. M.

7	17	30	7	45	15
7	22	19	7	42	0

*Completed*

Dredge No. 5134 *date*, Feb 7, 1908  
Hydrog. T.N. Reel 77 Short Lead 35 lbs.  
Sdg. Mch. Turns 24 Cor'n 0 Depth 34 fms.  
Sdg. Cup 1 min. Amt. Bot'm Sample force  
Character of Bottom *Gravel*  
Thermom. { Make N.Y. Instr. - .4  
No. 1080223 Cor'n { Stem. - .2  
Bottom Reading 76.8 Cor'd Temp. 76.2  
Temp. Surf. { 78° Time 11:20 A.M. Air 83°  
78° Time 9:20 A.M. Air 81°  
Density: Surf. fms.  
Wind: Direction *East* Force ?  
Baromet. 29.6 Amt. of Clouds  $\sqrt{2}$  State of Sea  $\sqrt{2}$   
Weather *haze*.

Direction and Force of Current { Surface  
of Current { Bottom

Tide

General Locality *Sulu Sea* 4.9 miles

Position  $6^{\circ}44'10'' N.$   $121^{\circ}46'48'' E.$

Chart used: No. C.S. 4511 Ed'n. ?

Drift: Direction  $57^{\circ} 30''$  Distance 0.4 m.

Depth of Haul 25 fms.

Apparatus and Rig used 10' Inter. & 250-lb.  
sinker.

Time towing 1 h. 20 m.

Remarks: *W.L.*

*1. - 1!*

Deck Officer *W. J. ...*

Recorder

Arrived

11-1023

SOUNDING WIRE.		FMS.	DREDGING CABLE.		
M. DOWN.	UP.		M.	UP.	M.
5330	5330	0	8330	8	W
5700	5700	100	0555	8	X
		200			
		300			
		400			
		500			
		600			
		700			
		800			
		900			
		1000			
		1100			
		1200			
		1300			
		1400			
		1500			
		1600			
		1700			
		1800			
		1900			
		2000			
		2100			
		2200			
		2300			
		2400			
		2500			
		2600			
		2700			
		2800			
		2900			
		3000			
		3100			
		3200			
		3300			
		3400			
		3500			
		3600			
		3700			
		3800			
		3900			
		4000			
		4100			
		4200			
		4300			
		4400			
		4500			
		4600			
		4700			
		4800			
		4900			

Ok 45

Dredge No. 19  
Hydrog. Date, 19

Sdg. Mch. 7N Reel 7N Shot} 35 lbs.

Turns 23 Cor'n Depth 22 fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom sand & shell

Thermom. { Make None Cor'n { Instr.  
No. Stem.

Bottom Reading Cor'd. Temp.

Temp. Surf. { 80° Time 8:50 A.M. } Air { 86°  
17° Time  
17°

Density: Surf. 1.02489 fms.

Wind: Direction Calm Force 0

Baromet. 30.00 Amt. of Clouds 3 State of Sea 5

Weather

Direction and Force of Current. { Surface  
Bottom

Tide

7.5 35° E. 0.75 m.

General Locality New

Latitude 35° 10' S. Longitude 172° 50' E.

Position

Chart used: No. 684562 Ed'n

Drift: Direction 172° 10' Distance 6

Depth of Haul

Apparatus and Rig used 12' Fl

Time towing 20 m.

Remarks:

Deck Officer

Recorder

11-1023

SOUNDING WIRE.		FMS.	DREDGING CABLE.	
M. DOWN.	UP.	M.	M.	UP.
		0	2	2
		100	2	2
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		
		2500		
		2600		
		2700		
		2800		
		2900		
		3000		
		3100		
		3200		
		3300		
		3400		
		3500		
		3600		
		3700		
		3800		
		3900		
		4000		
		4100		
		4200		
		4300		
		4400		
		4500		
		4600		
		4700		
		4800		
		4900		



## SOUNDING WIRE.

M. DOWN. | UP. | M.

0 | 50 | 50  
0 | 59 | 35

FMS.

0  
200  
300  
400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400  
2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000  
4100  
4200  
4300  
4400  
4500  
4600  
4700  
4800  
4900

## DREDGING CABLE.

M. DOWN. | UP. | M.

10 | 13 | 11 | 18 | 20  
10 | 5 | 30 | 11 | 10 | 20

Dredge } No. 5150 Date, Sept. 17, 1923  
 Hydrog. }  
 Sdg. Mch. 5150 Reel 5150 Shot 35 lbs.  
 Turns 7 Cor'n N.W. Depth 76 fms.  
 Sdg. Cup 0' Amt. Bot'm Sample Drilling (continued)  
 Character of Bottom fine sand

Thermom.	{ Make } none used	Cor'n	{ Instr. } —
{ No. }		{ Stem. }	—

Bottom Reading — Cor'd Temp. —  
 Temp. Surf. { 80° Time 2:04 P.M. Air } 82°  
 { 82° Time 2:35 P.M. } Air 84°

Density: Surf. 1.02477 fms.  
 Wind: Direction N.W. Force 1.  
 Baromet. 29.66 Amt. of Clouds 4 State of Sea  
 Weather 60

Direction and Force of Current { Surface  
 of Current. Bottom

Tide J. 10.15. S. 33° W. 6.1 mi.

General Locality S. 33° W.  
 6° 0' 45" N., 121° 35' 0" E. - Vancouver Is.  
 Position (N. Lat.) S. 33° W. 113° 35' E. (E. Lat.) N. 6° 0' 45" N.  
 Chart used: No. C. 2. Ed'n 3

Drift: Direction N. 70° W. Distance 0.2 mi.  
 Depth of Haul 10 fms.  
 Apparatus and Rig used

Time towing — h. m.  
 Remarks: Surface temp. was 82°  
 31 minutes

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M.	DOWN.	UP.	M.	M.	UP.	M.
157	20	2	00	00	2	23
157	59	1	58	00	07	50
				200	09	15
				300	15	25
				400		
				500		
				600		
				700		
				800		
				900		
				1000		
				1100		
				1200		
				1300		
				1400		
				1500		
				1600		
				1700		
				1800		
				1900		
				2000		
				2100		
				2200		
				2300		
				2400		
				2500		
				2600		
				2700		
				2800		
				2900		
				3000		
				3100		
				3200		
				3300		
				3400		
				3500		
				3600		
				3700		
				3800		
				3900		
				4000		
				4100		
				4200		
				4300		
				4400		
				4500		
				4600		
				4700		
				4800		
				4900		



SOUNDING WIRE.		FMS.	DREDGING CABLE.	
M. DOWN.	UP.	M.	M. DOWN.	UP.
0	0	0	0	0
200	200	200	200	200
300	300	300	300	300
400	400	400	400	400
500	500	500	500	500
600	600	600	600	600
700	700	700	700	700
800	800	800	800	800
900	900	900	900	900
1000	1000	1000	1000	1000
1100	1100	1100	1100	1100
1200	1200	1200	1200	1200
1300	1300	1300	1300	1300
1400	1400	1400	1400	1400
1500	1500	1500	1500	1500
1600	1600	1600	1600	1600
1700	1700	1700	1700	1700
1800	1800	1800	1800	1800
1900	1900	1900	1900	1900
2000	2000	2000	2000	2000
2100	2100	2100	2100	2100
2200	2200	2200	2200	2200
2300	2300	2300	2300	2300
2400	2400	2400	2400	2400
2500	2500	2500	2500	2500
2600	2600	2600	2600	2600
2700	2700	2700	2700	2700
2800	2800	2800	2800	2800
2900	2900	2900	2900	2900
3000	3000	3000	3000	3000
3100	3100	3100	3100	3100
3200	3200	3200	3200	3200
3300	3300	3300	3300	3300
3400	3400	3400	3400	3400
3500	3500	3500	3500	3500
3600	3600	3600	3600	3600
3700	3700	3700	3700	3700
3800	3800	3800	3800	3800
3900	3900	3900	3900	3900
4000	4000	4000	4000	4000
4100	4100	4100	4100	4100
4200	4200	4200	4200	4200
4300	4300	4300	4300	4300
4400	4400	4400	4400	4400
4500	4500	4500	4500	4500
4600	4600	4600	4600	4600
4700	4700	4700	4700	4700
4800	4800	4800	4800	4800
4900	4900	4900	4900	4900

Ok Pl.

Dredge No. 474

Date, Feb 19, 19

SDG. Mch.

Reel

Sheet

Leads

lbs.

Turns 20

Cor'n

Depth 19

fms.

SDG. Cup 10

Amt. Bot'm Sample

Character of Bottom S.

Thermom. { Make } 2 in used

Cor'n { Instr. } Stem.

Bottom Reading Cor'd Temp.

Temp. Surf. { 81° Time 11.25 } Air { 91°  
81 Time 11.48 } 90°

Density: Surf. 1.02574 fms.

Wind: Direction Variable Force 0-1

Baromet. 30.00 Amt. of Clouds 9 State of Sea

Weather

Direction and Force of Current. { Surface  
Bottom

Tide 3.3 m.

General Locality

Pangasin 45°W  
Position 6° 30' N. 120° 15' E.

Chart used: No. 4542 Ed'n

Drift: Direction N 45°W Distance 16

Depth of Haul

Apparatus and Rig used 12' Agassiz

Time towing h. 2 m.

Remarks:

Deck Officer

Recorder

11-1023

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
Q M.	Down.	Up.	M.		Q M.	Down.	Up.	Q M.
11	19	10	11	20	00	0	11	23
				400		40	40	47
				200		20	30	37
				300		30	35	32
				400		40	45	41
				500		50	55	51
				600		60	65	61
				700		70	75	71
				800		80	85	81
				900		90	95	91
				1000		100	105	101
				1100		110	115	111
				1200		120	125	121
				1300		130	135	131
				1400		140	145	141
				1500		150	155	151
				1600		160	165	161
				1700		170	175	171
				1800		180	185	181
				1900		190	195	191
				2000		200	205	201
				2100		210	215	211
				2200		220	225	221
				2300		230	235	231
				2400		240	245	241
				2500		250	255	251
				2600		260	265	261
				2700		270	275	271
				2800		280	285	281
				2900		290	295	291
				3000		300	305	301
				3100		310	315	311
				3200		320	325	321
				3300		330	335	331
				3400		340	345	341
				3500		350	355	351
				3600		360	365	361
				3700		370	375	371
				3800		380	385	381
				3900		390	395	391
				4000		400	405	401
				4100		410	415	411
				4200		420	425	421
				4300		430	435	431
				4400		440	445	441
				4500		450	455	451
				4600		460	465	461
				4700		470	475	471
				4800		480	485	481
				4900		490	495	491

Dredge No. 1 Date, 19 Oct.  
Hydrog. Reel Shot Leads 10 lbs.  
Sdg. Mch. — Reel —  
Turns 24 Cor'n — Depth 24 fms.  
Sdg. Cup Amt. Bot'm Sample Trawl  
Character of Bottom C. S. S. R.  
Thermom. { Make Cor'n { Instr. —  
No. { none used. Cor'n { Stem. —  
Bottom Reading — Cor'd Temp. —  
Temp. Surf. { 80° Time 10.08 a. 82°  
81° Time 10.32 a. Air 82°  
Density: Surf. 1.02468 fms.  
Wind: Direction ENE Force 1  
Baromet. 29.76 Amt. of Clouds 8 State of Sea S.  
Weather

Direction and Force of Current { Surface  
Bottom

Tide Sealade Od End 1180W 3.4 mi.  
General Locality Sulu Sea.  
Position  $11^{\circ}45'45''N, 120^{\circ}45'45''E$ . —  $11^{\circ}45'45''S, 120^{\circ}45'45''E$ .  
Position Bolson, 1180W 3.4 mi.  
Chart used: No. C.S. 4542 Ed'n 2  
Drift: Direction N 77°W Distance 1/2 mi.  
Depth of Haul Bottom

Apparatus and Rig used 12' — Trawl  
trawl, dredge, bottom trawl, etc.

Time towing — h. 15 m.  
Remarks: 1000 ft. 1000 ft. 1000 ft.

Deck Officer John C. H. Smith Recorder John C. H. Smith 11-4023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M. DOWN.	UP.	M.		M. DOWN.	UP.	M.
10	03	20	0	10	20	1032
10	03	40	100	10	09	1030
			200	10	00	1029
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Dredge No. 11 Date, 19

Sdg. Mch. 1 Reel Shot } lbs.

Turns 1 Cor'n Depth fms.

Sdg. Cup Amt. Bot'm Sample

Character of Bottom

Thermom. Make No. Cor'n Instr. Stem.

Bottom Reading Cor'd. Temp.

Temp. Surf.  $72^{\circ}$  Time 1.28 Air  $82^{\circ}$

Density: Surf. 1.02523 fms.

Wind: Direction N. x E. Force 1-2

Baromet. Amt. of Clouds State of Sea

Weather

Direction and Force of Current. Surface

Bottom

Tide 3.8 m.

General Locality

(N)  $12^{\circ} 33' S$  (W)  $172^{\circ} 27' E$

Position  $3^{\circ} 34' S$   $120^{\circ} 47' E$

Chart used: No. 4544 Ed'n

Drift: Direction S 51° F Distance 7

Depth of Haul Bottom

Apparatus and Rig used 12' Agassiz

12' Agassiz

12' Agassiz

Time towing 17 1/2 m.

Remarks: 1000 ft.

Deck Officer Recorder 11-1023

SOUNDING WIRE.			FMS.	DREDGING CABLE.		
M.	Down.	Up.	M.	M.	Down.	Up.
1	030	1 0115	0	1	0500	1 2620
1	40	1 0100	100	1	0630	1 2420
			200			
			300			
			400			
			500			
			600			
			700			
			800			
			900			
			1000			
			1100			
			1200			
			1300			
			1400			
			1500			
			1600			
			1700			
			1800			
			1900			
			2000			
			2100			
			2200			
			2300			
			2400			
			2500			
			2600			
			2700			
			2800			
			2900			
			3000			
			3100			
			3200			
			3300			
			3400			
			3500			
			3600			
			3700			
			3800			
			3900			
			4000			
			4100			
			4200			
			4300			
			4400			
			4500			
			4600			
			4700			
			4800			
			4900			

Ok Pl.

Dredge No. 5 Date, 19

Sdg. Mch. Reel Shot} Lead} lbs.

Turns 2 Cor'n Depth 2 fms.

Sdg. Cup Amt. Bot'm Sample /

Character of Bottom

Thermom. { Make Cor'n { Instr. Stem.

Temp. Surf. { 71 Time / Air { 52

78 Time 11:47 A.M. Air 82

Density: Surf. 1.02495 fms.

Wind: Direction N.W. Force 1

Baromet. Amt. of Clouds 7 State of Sea

Weather

Direction and Force of Current { Surface Bottom

Tide

Position 5° 23' 20" N 120° 35' 15" E

General Locality Sulu Sea.

Chart used: No. 4514 C.S. Ed'n

Drift: Direction Distance

Depth of Haul Bottom

Apparatus and Rig used 12 71.2 7 5

Time towing? h. m.

Remarks: /

Deck Officer Recorder

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
<u>M.</u>	DOWN.	UP.	<u>M.</u>		<u>M.</u>	DOWN.	UP.	<u>M.</u>
11	37	-	11 3740	0	11	39	-	11 47-
11	37	15	11 3720	100	11	4280	11 4345	
				200	11	43-	11 4330	
				300				
				400				
				500				
				600				
				700				
				800				
				900				
				1000				
				1100				
				1200				
				1300				
				1400				
				1500				
				1600				
				1700				
				1800				
				1900				
				2000				
				2100				
				2200				
				2300				
				2400				
				2500				
				2600				
				2700				
				2800				
				2900				
				3000				
				3100				
				3200				
				3300				
				3400				
				3500				
				3600				
				3700				
				3800				
				3900				
				4000				
				4100				
				4200				
				4300				
				4400				
				4500				
				4600				
				4700				
				4800				
				4900				

OK Pl.

Dredge } No. 5152 Date, 18 Feby, 1908  
Hydrog. }

Sdg. Mch. T. N. Reel T.N. Shot } 35 lbs.  
Lead }

Turns 34 Cor'n - Depth 34 fms.

Sdg. Cup Arming Amt. Bot'm Sample Arming full

Character of Bottom wls (= white sand)

Thermom. { Make Cor'n { Instr. -  
No. } none used. Stem. -

Bottom Reading Cor'd Temp. -

Temp. Surf. { 81° Time 3:24 p.m. } Air { 87°  
81° Time 3:42 p.m. } 86°

Density: Surf. 1.02457 fms.

Wind: Direction WSW Force 1-2

Baromet. 29.64 Amt. of Clouds 9 State of Sea S.

Weather  $\frac{1}{2}$ .

Direction and Force of Current. { Surface  
Bottom

Tide  $\frac{1}{2}$  mi.

General Locality Siboga Passage.

5°22'55"S, 120°15'45"E. Tambagan 1 (S)

Position 563°E, Pajumajan I (W) S 2°W

Chart used: No. SC 4514 Ed'n 2

Drift: Direction S 56°W Distance 0.5 m.

Depth of Haul Bottom

Apparatus and Rig used 12' Ag. NR. with chain,  
5 glass floats, 2 wing wts, 1 trivet, and  
1 mud bag.

Time towing - h. 15 m.

Remarks: "Time towing" is figured from  
3:25:30 p.m.

Deck Officer Mr. Hazard. Recorder Frankel -

SOUNDING WIRE.				FMS.	DREDGING CABLE.			
M. DOWN.	UP.	P.	M.		C.	M. DOWN.	UP.	P.
3	20 40	3 22 00		0	3	23 20	3 42 50	
3	21 00	3 21 05		14 100 50	3	25 30		
				200 6	3	28 00	3 40 30	
				300				
				400				
				500				
				600				
				700				
				800				
				900				
				1000				
				1100				
				1200				
				1300				
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				2800				
				2900				
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				3900				
				4000				
				4100				
				4200				
				4300				
				4400				
				4500				
				4600				
				4700				
				4800				
				4900				

$$150 \frac{60}{2} \sim$$

$$\cancel{120}$$

$$\frac{30}{3}$$

$$250 \frac{60}{4}$$

$$\cancel{240}$$

$$\frac{60}{6}$$

4714

$$\begin{array}{r} 200 \\ 221 \end{array}$$

116ms = 3 min 10"